

LUMINARIES



Luminaries

- A luminary is a great way to add visual appeal to your landscape.
- Add value, beauty and elegance to your property.
- Available in an endless array of styles, sizes and colors, luminaries can accommodate any part of your landscape.
- The output characteristics of luminaires describe the way in which a lighting fixture performs its main function, that of distributing luminous flux emitted from the lamp in a space.



Application

The most common uses for luminaries for commercial applications are:

- Commercial Buildings
- Streets
- Parks
- Public areas
- Car Parks
- Company Signage

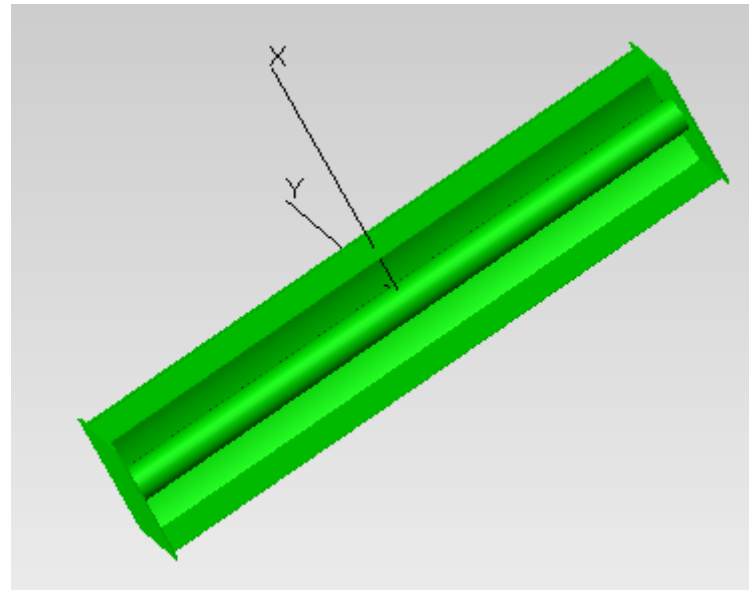
The most common uses for luminaries for residential applications are:

- Patios
- Pathways and walkways
- Around swimming pools
- Garden Beds
- Driveways

Design Luminaries

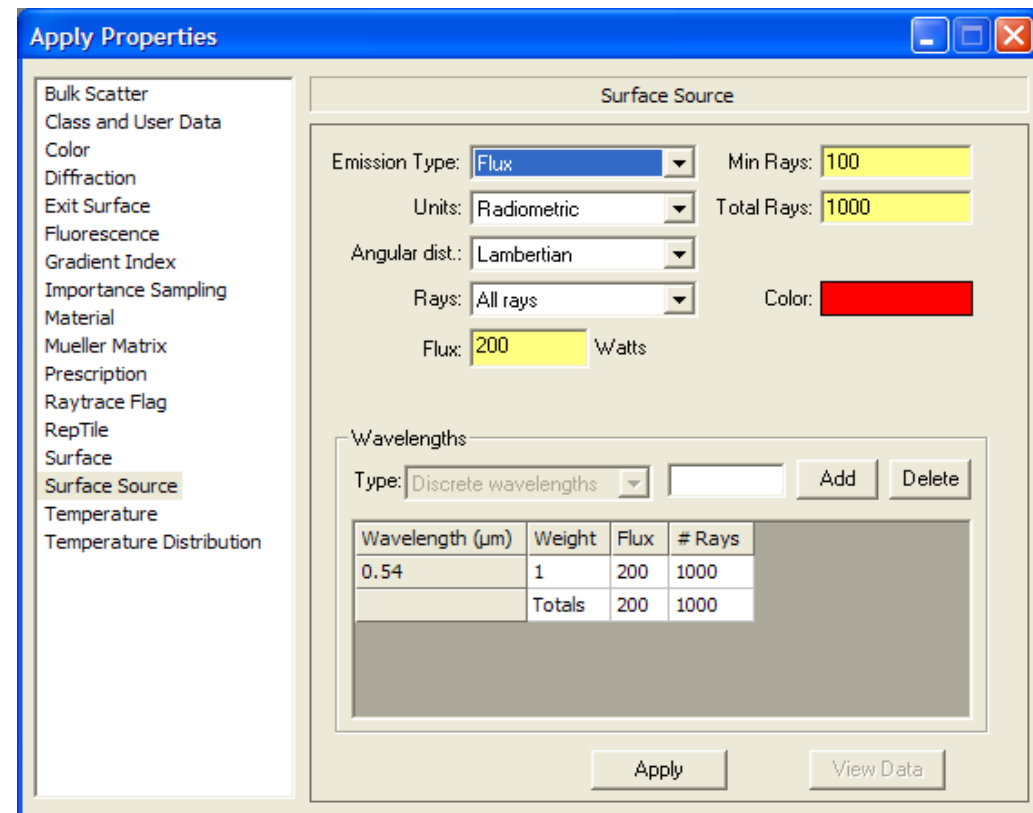
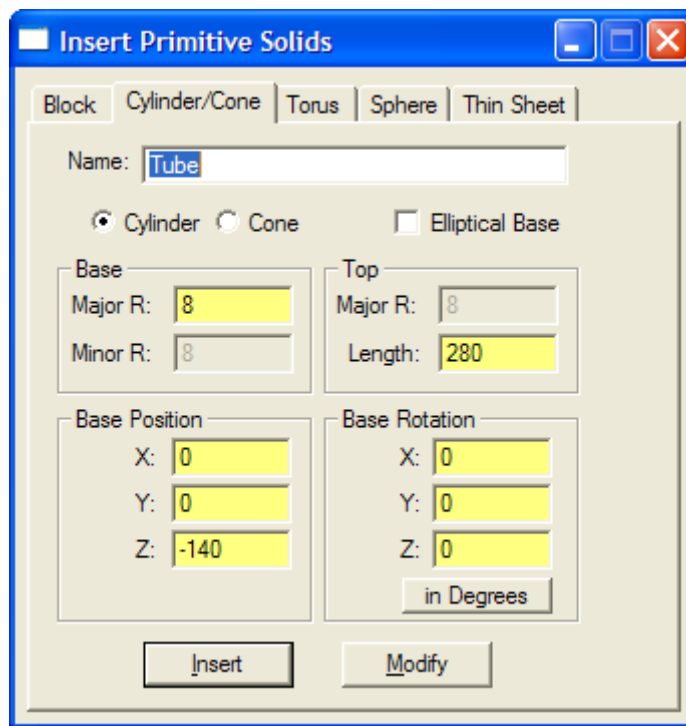
To Design Luminaries, we need following Object :

- Source (Bulb, Fluorescent Tube, etc)
- Back Reflector or Diffuse Boundary



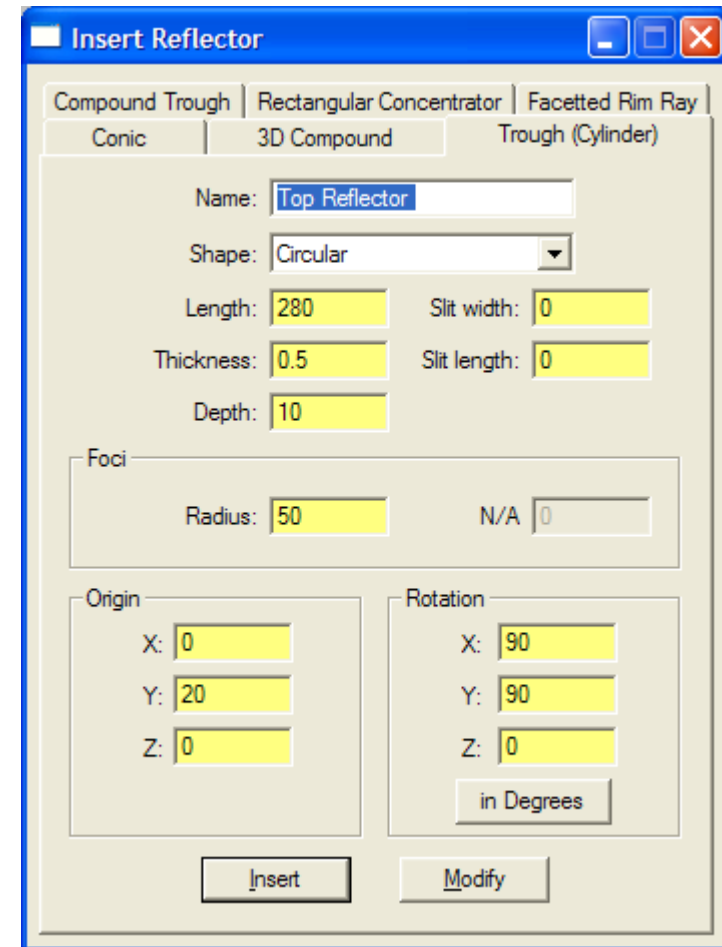
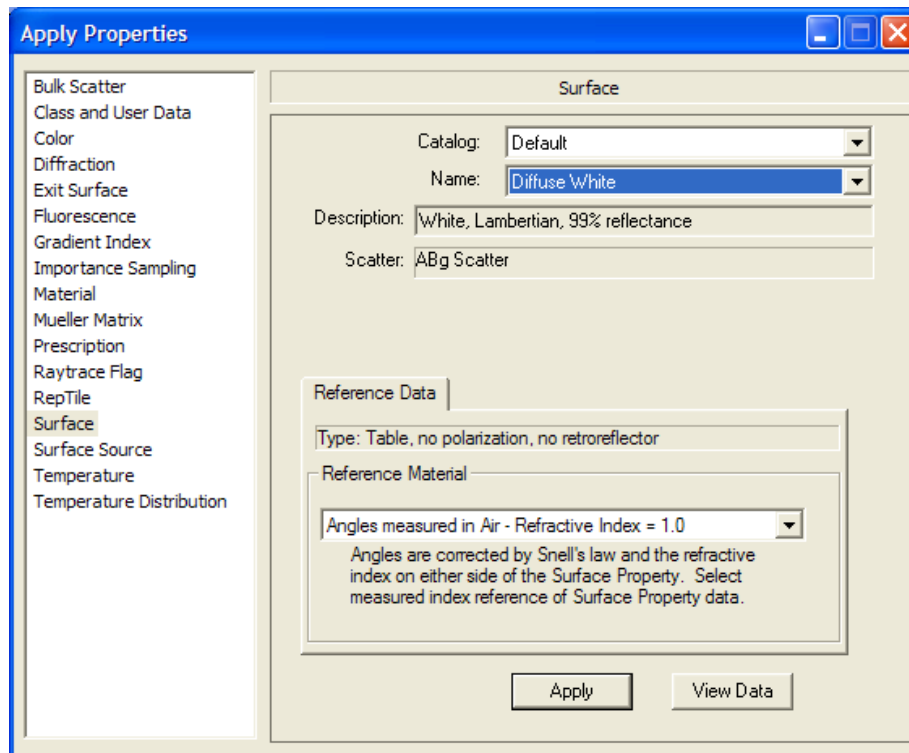
Design TUBELIGHT

- Define Tube by go to Insert > Primitive Solid > Cylinder/Cone
- Define Tube as Light Souce by Select Surface 0



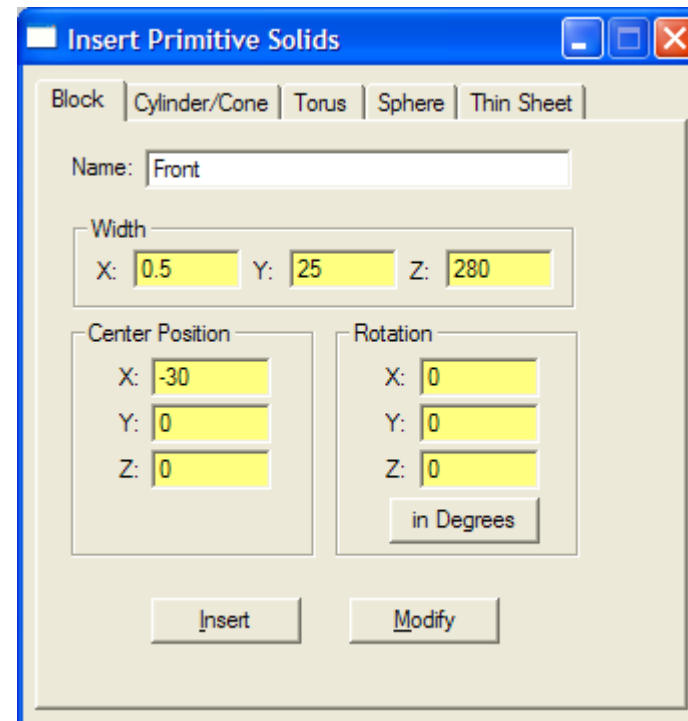
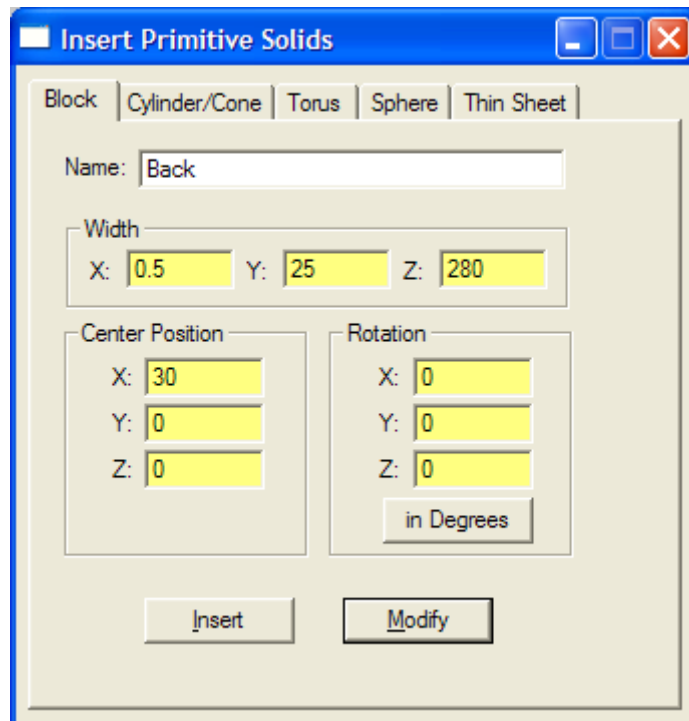
Top Reflector

- Top Reflector can be define by Go to Insert > Reflector > Trough
- Define Inner Surface 4 as perfect Diffuser

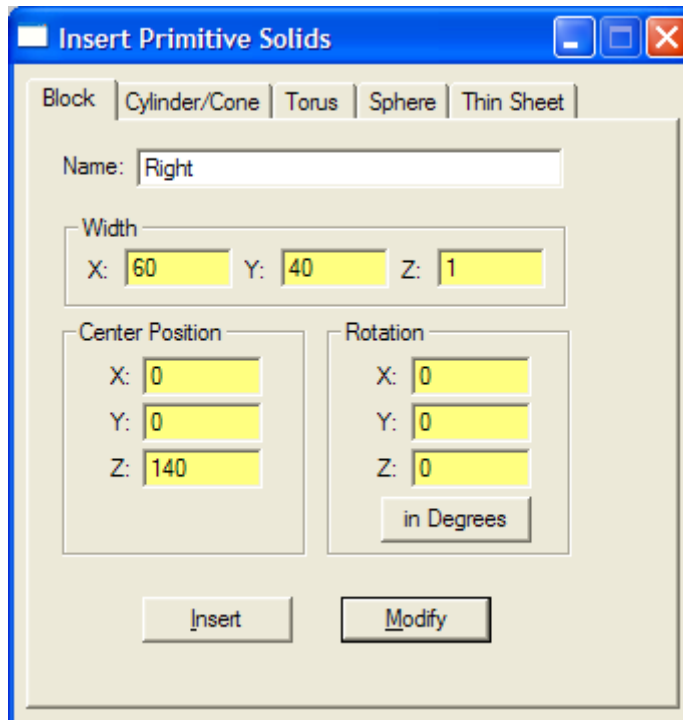


Side Walls

- Define Side walls by Go to Insert > Primitive Solids > Block as below



Side Walls



Insert Primitive Solids

Block | Cylinder/Cone | Torus | Sphere | Thin Sheet

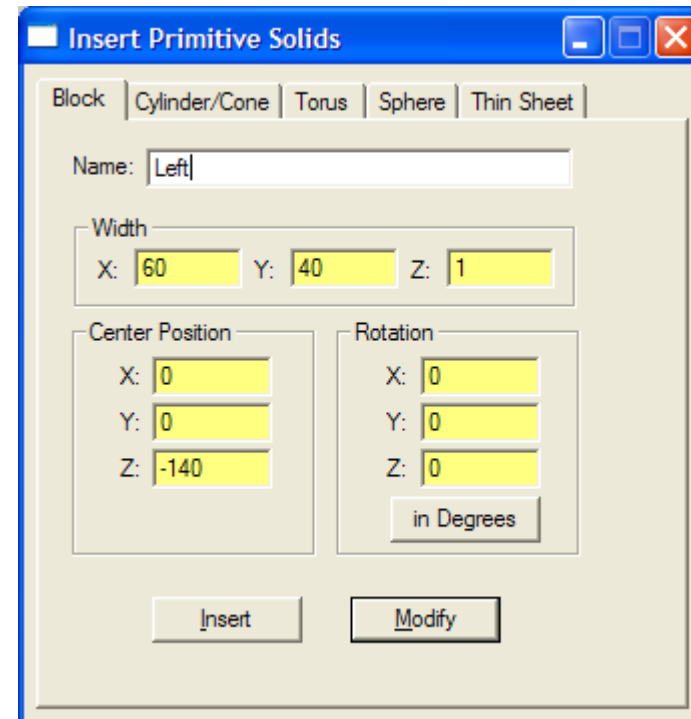
Name: Right

Width
X: 60 Y: 40 Z: 1

Center Position
X: 0
Y: 0
Z: 140

Rotation
X: 0
Y: 0
Z: 0
in Degrees

Insert Modify



Insert Primitive Solids

Block | Cylinder/Cone | Torus | Sphere | Thin Sheet

Name: Left

Width
X: 60 Y: 40 Z: 1

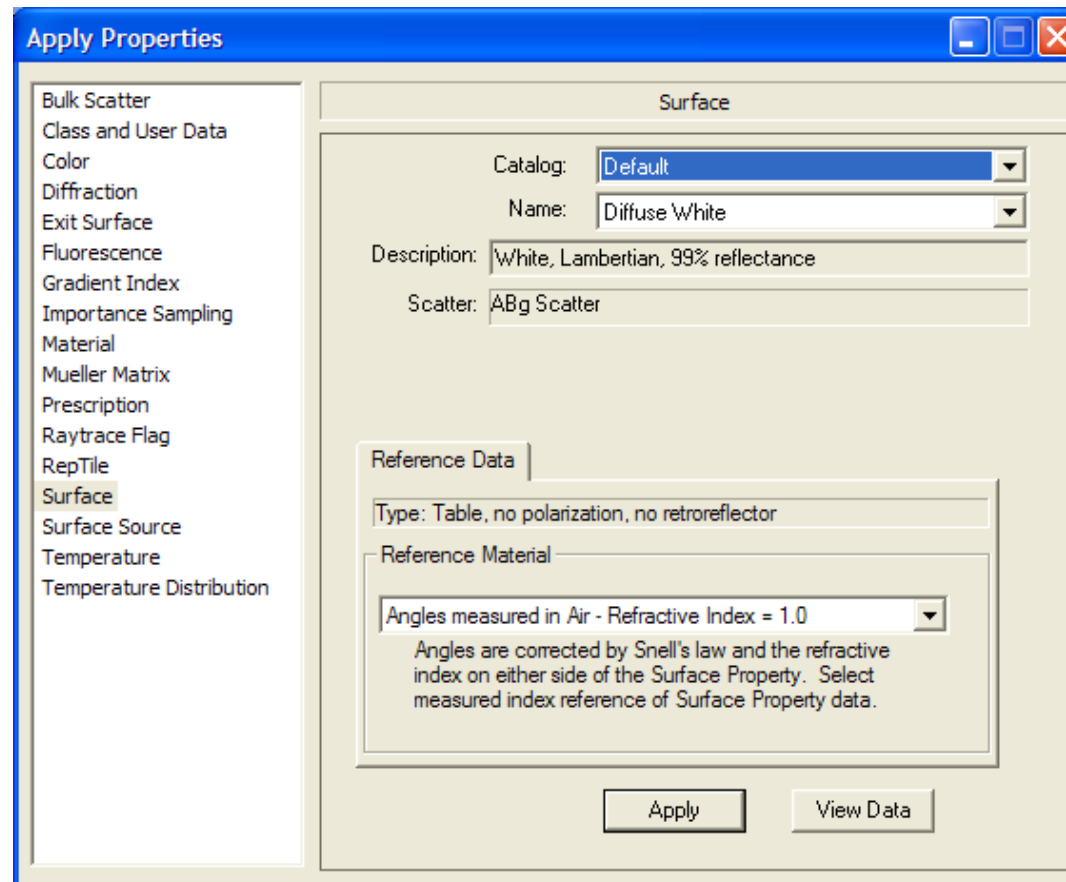
Center Position
X: 0
Y: 0
Z: -140

Rotation
X: 0
Y: 0
Z: 0
in Degrees

Insert Modify

Surface Properties of Side Wall

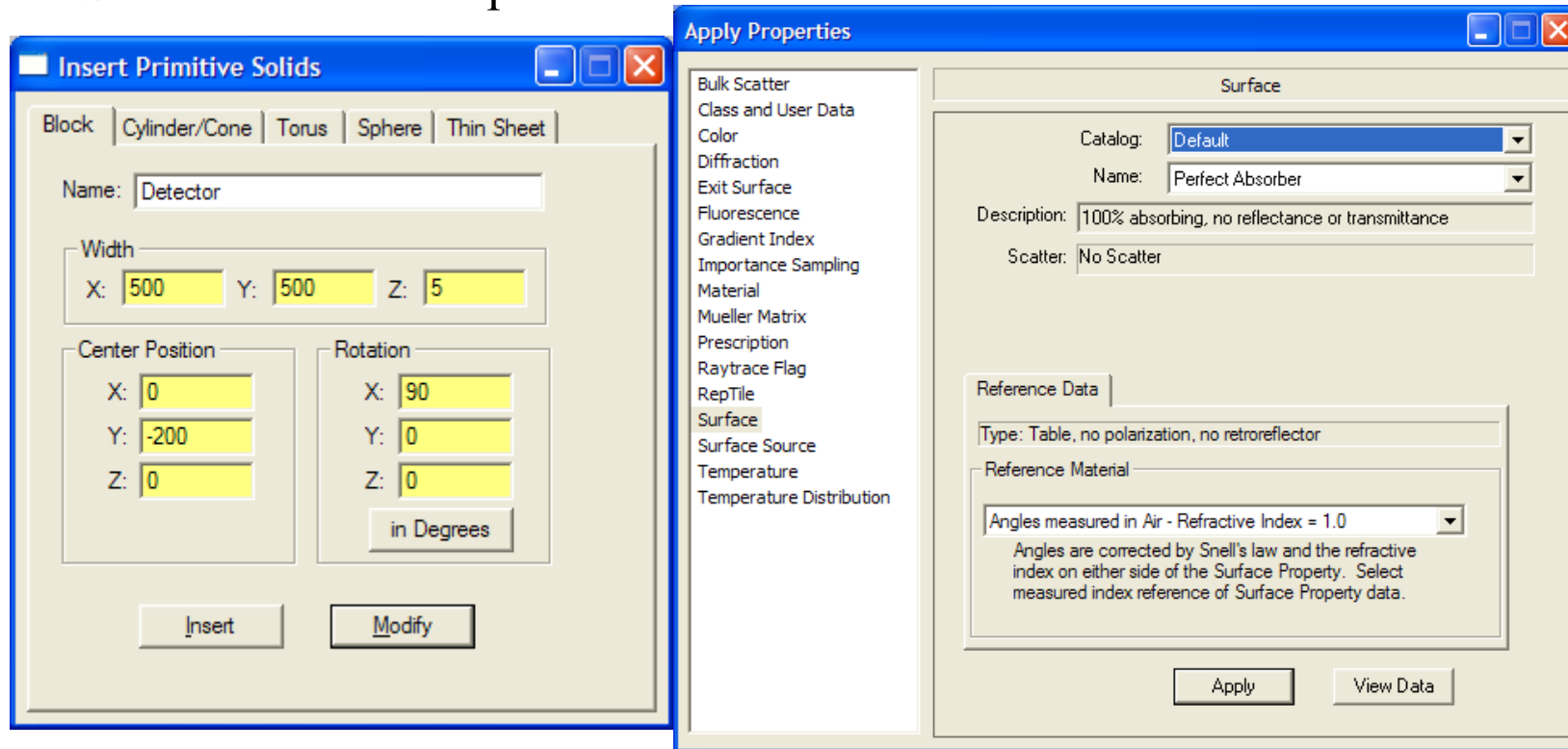
- Select Inner Surface and Define Diffuse white



Detector

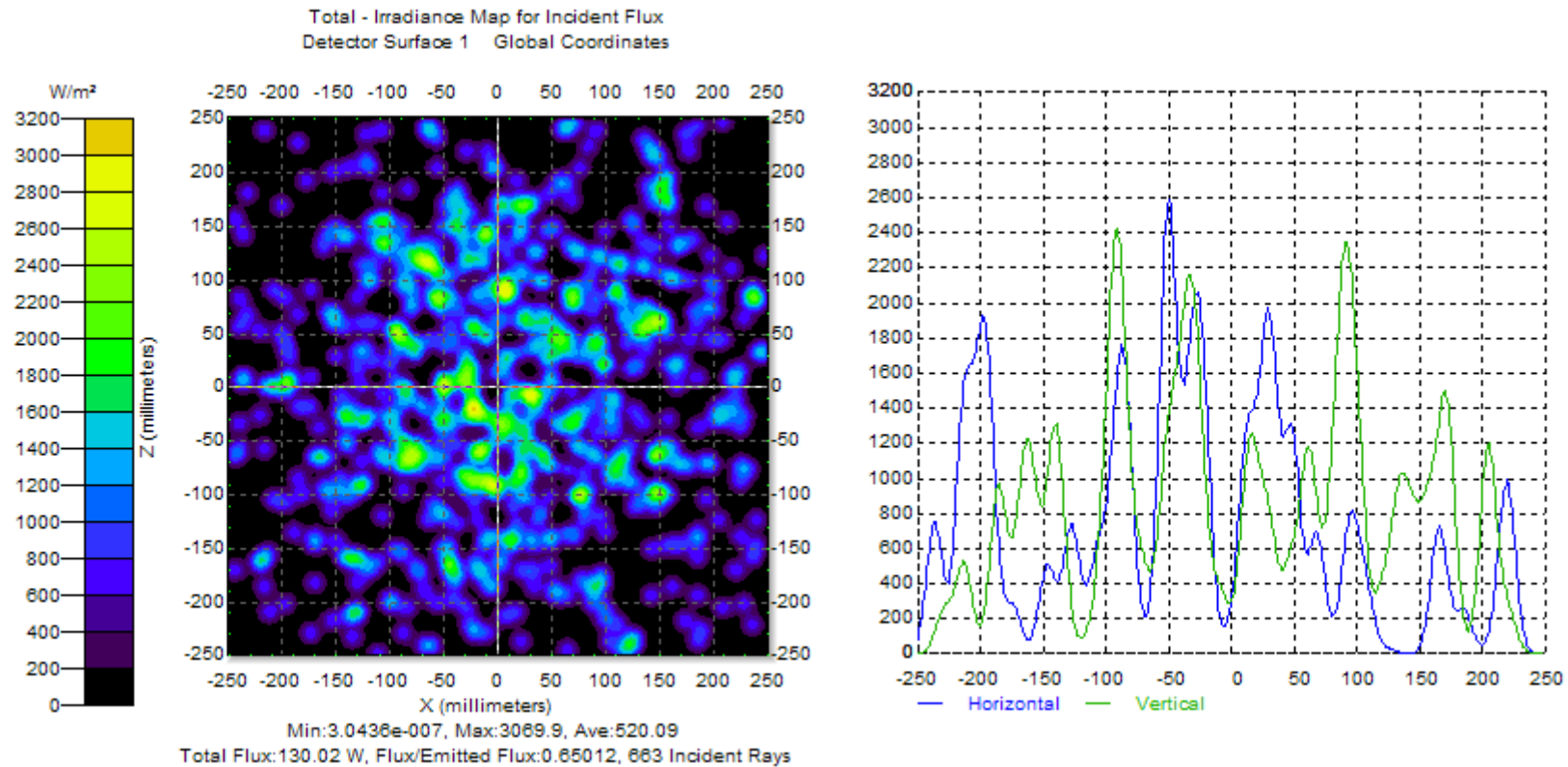
We can define detector which act as Floor with following properties & Location:

- Surface 1 define as perfect absorber.



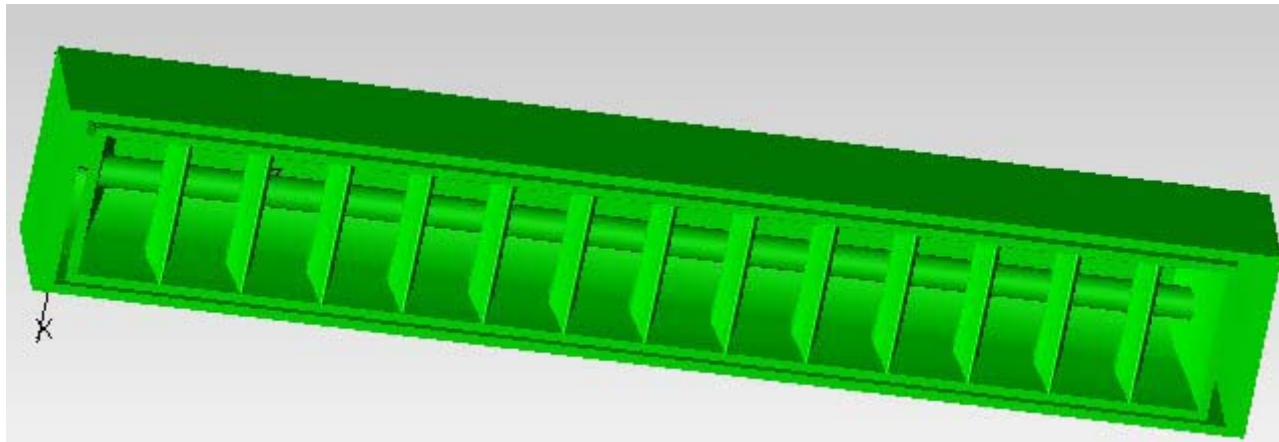
Analysis

- Raytrace > Trace Rays



Modify

- Define Luminaries with introduce “Grillet”



Detector

Irradiance/Illuminance Map Options

Map Data

Quantities to plot: Normalize to:

Rays to plot:

Set Max: Set Min:

Display Options

Smoothing Log Scale No. of Pixels:

Contour Plot Relief Plot FFT Grid:

Local Coordinates Profiles Symmetry:

Gradient Display Color Map:

Convert to foot-candles (fc)

Contour Levels:

Auto. levels Use percent of Max. (1.0 = 100%)

Selection:

Number:

Orientation of plot plane

Automatically calculate Normal and Up Vectors

Normal Vector: X: Y: Z:

Up Vector: X: Y: Z:

Analysis

